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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,458

04/02/2004

Hironori Kobayashi

TJK/462

3198

27717 7590 02/22/2007
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EXAMINER

MCPHERSON, JOHN A

ART UNIT

PAPER NUMBER

1756

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/817,458

Applicant(s)

KOBAYASHI ET AL.

Examiner

John A. McPherson

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it is not presented as a single paragraph. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 2, 5 and 32 are objected to because of the following informalities:

In claim 2, line 2, "calim" should be corrected to --claim--.

In claim 5, line 4, "(Here" should be corrected to --(here--, and in line 8 "3.)." should be corrected to --3).--, so that the claim is presented as a single sentence.

In claim 32, line 8, "(Here" should be corrected to --(here--, and in line 11 "3.)." should be corrected to --3).--, so that the claim is presented as a single sentence.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "the UV curing ink" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. This rejection could be overcome by amending "UV curing ink" to --curing type ink--.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 and 23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,294,313 to Kobayashi et al. (Kobayashi '313). Kobayashi '313 discloses a process for producing a color filter comprising the steps of forming a first photocatalyst-containing layer on a transparent substrate; exposing the first photocatalyst-containing layer to light; forming a black matrix on the exposed areas of the first photocatalyst-containing layer; forming a second photocatalyst-containing layer (corresponding to the property variable layer of the present invention) on the first photocatalyst-containing layer; exposing the second photocatalyst-containing layer to light; and feeding a coating composition to the second photocatalyst-containing layer. See column 36, line 58 to column 37, line 51.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-227513 (JP '513) in view of 2003/0008217 to Kobayashi (Kobayashi '217). JP '513 discloses a method of producing a color filter comprising the steps of forming a photocatalyst-containing layer on a transparent substrate; forming either a wettability variable layer or a decomposition removable layer on the photocatalyst-containing layer; exposing to form exposure parts for picture element parts; and forming picture element parts by ink jet printing, wherein shading elements are provided along the boundary of the picture element parts. See the abstracts; paragraphs [0175]-[0183] of the computer-generated translation; and Figures 7(A)-(E). However, JP '513 discloses providing the shading elements on the transparent substrate, then forming the photocatalyst-containing layer on the transparent substrate and the shading elements; JP '513 does not disclose providing the shading elements on the photocatalyst-containing layer, as in the present invention.

Kobayashi '217 discloses a method of producing a pattern-formed structure comprising the steps of preparing a substrate having a characteristic-modifiable layer; preparing a photocatalyst-containing layer side substrate having a photocatalyst-containing layer formed on a base; arranging the substrate with a clearance of no more

than 200 μm therebetween; and irradiating energy to the characteristic-modifiable layer (see the abstract), wherein the photocatalyst-containing layer side substrate may further comprise a light shielding pattern portion either on the transparent base (i.e. under the photocatalyst-containing layer) or on the photocatalyst-containing layer. See paragraphs [0264], [0265], and Figures 3 and 4. It would have been obvious to one skilled in the requisite art to provide the light shielding pattern portion on the photocatalyst-containing layer, as taught by Kobayashi '217, in the process of JP '513 because it is taught that providing the light shielding pattern portion on the photocatalyst-containing layer is an art-recognized alternative to providing the light shielding pattern portion on the base (i.e. under the photocatalyst-containing layer) in a process of forming a pattern by irradiating a characteristic-modifiable layer whose characteristic can be modified by the action of a photocatalyst.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. McPherson whose telephone number is (571) 272-1386. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 1756

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

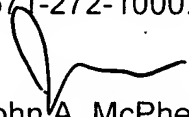
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John A. McPherson
Primary Examiner
Art Unit 1756

JAM
2/12/07